

WHAT IS CLAIMED IS:

- 1           1. An item, comprising:  
2           an item surface; and  
3           a plurality of machine-readable item codes printed on the item surface, at least  
4           one of the item codes being associated with the item and being substantially invisible to a  
5           human.
- 1           2. The item of claim 1, wherein each of the item codes are associated with the  
2           item and are substantially invisible to a human.
- 1           3. The item of claim 1, wherein at least two of the item codes contain the same  
2           information.
- 1           4. The item of claim 1, wherein at least two of the item codes contain different  
2           information.
- 1           5. The item of claim 4, wherein the different information is adapted to be  
2           combined via at least one of: (i) a sequence number in each item code; (ii) at least one  
3           item code describing an order in which at least one other item code should be combined,  
4           and (iii) a position of the item codes on the item surface.
- 1           6. The item of claim 4, wherein at least one item code contains meta-data  
2           associated with at least one other item code.

1           7. The method of claim 4, wherein the at least two of the item codes containing  
2 different information are printed on the item surface via different techniques to render the  
3 item codes substantially invisible to a human.

1           8. The item of claim 1, wherein at least one item code comprises: (i) a bar code,  
2 (ii) a two-dimensional code, and (iii) a watermark.

1           9. The item of claim 1, wherein at least one item code indicates at least one of: (i)  
2 an item identifier, (ii) a manufacturer identifier, (iii) a distributor identifier, (iv) a delivery  
3 service identifier, (v) a purchaser identifier, (vi) an owner identifier, (vii) a user identifier,  
4 and (viii) a merchant identifier.

1           10. The item of claim 1, wherein at least one item code is adapted for use with at  
2 least one of: (i) a point of sale system, (ii) an inventory system, (iii) a delivery service  
3 system, (iv) an identification system, (v) a warehousing system, (vi) a smart shopping  
4 cart system, (vii) a production system, and (viii) an assembly system.

1           11. The item of claim 1, wherein at least one item code is formed using at least  
2 one of: (i) a chemical, (ii) an invisible ink, (iii) an ink that becomes visible in ultra-violet  
3 light, and (iv) an ink detectable with radiation outside of the visible spectrum.

1           12. The item of claim 1, wherein the item comprises at least one of: (i) a product,  
2 (ii) an identification card, (iii) a negotiable instrument, (iv) a container, (v) a package,  
3 (vi) an envelope, (vii) an event ticket, and (viii) a document.

1           13. The item of claim 1, wherein the item surface comprises at least one of: (i) a  
2 product surface, (ii) a product label, (iii) a product tag, (iv) a picture, (v) an image, (vi) a

3 container surface, (vii) a package surface, (viii) a container label, (ix) a package label, (x)  
4 a container tag, and (xi) a package tag.

1 14. The item of claim 1, wherein the item has two distinct item surface areas, and  
2 at least one item code is printed each distinct item surface area.

1 15. The item of claim 1, wherein visible information is displayed on the same  
2 area of the item surface as at least one item code.

1 16. An identification card associated with a card-holder, comprising:  
2 an identification card surface; and  
3 a machine-readable code printed on the identification card surface, the code being  
4 associated with the card-holder and being substantially invisible to a human.

1 17. The identification card of claim 16, wherein the code indicates at least one of:  
2 (i) a card-holder identifier, (ii) a benefit, and (iii) an expiration date.

1 18. The identification card of claim 16, wherein visible information is displayed  
2 on the same area of the identification card as the code.

1 19. The identification card of claim 15, wherein a plurality of codes are printed  
2 on the identification card surface, each of the codes being associated with the card-holder  
3 and being substantially invisible to a human.

1           20. An item, comprising:  
2           an item surface; and  
3           a machine-readable item code printed on the item surface, the item code being  
4 associated with the item and being substantially invisible to a human, wherein the item  
5 code is updated by a user.

1           21. The item of claim 20, wherein the item code is updated by the user to indicate  
2 information associated with at least one of: (i) a delivery service, (ii) a location, (iii) a  
3 time, (iv) a date, (v) a price, (vi) a merchant, (vii) a purchaser, (viii) an item status, (ix) a  
4 warranty, (x) a product, (xi) logistics, (xii) a tax, (xiii) a fee, (xiv) a duty, (xv) an  
5 inspection, (xvi) a packing slip, (xvii) a picking slip, (xviii) a bill, (xix) an order status,  
6 (xx) a product expiration, (xxi) a repair history, (xxii) a maintenance history, (xxiii) a  
7 warranty, and (xxiv) a provenance.

1           22. The item of claim 20, wherein a plurality of item codes are printed on the  
2 item surface, at least one of the item codes being associated with the item and being  
3 substantially invisible to a human.

1           23. An item, comprising:  
2           an item surface; and  
3           a machine-readable item code printed on the item surface, the item code being  
4 substantially invisible to a human and indicating at least one of: (i) information  
5 associated with use of the item, (ii) information associated with consumption of the item,  
6 (iii) instructions associated with the item, (iv) executable information associated with the  
7 item, (v) updates to adjust executable information associated with the item, (vi)  
8 instructions associated with assembling of the item, (vii) instructions associated with

9 processing the item, (viii) marketing information, (ix) provenance information, (x)  
10 information associated with a sale of the item, (xi) information associated with future  
11 disposition of the item, (xii) information associated with disposal of the item, (xiii)  
12 information associated with reclaiming at least a portion of the item, and (xiv)  
13 information associated with recycling at least a portion of the item.

1 24. The item of claim 23, wherein a plurality of item codes are printed on the  
2 item surface.

1 25. A method of marking an item having an item surface, comprising:  
2 determining an item code associated with the item; and  
3 printing a plurality of machine-readable item codes on the item surface, at least  
4 one of the item codes being associated with the item and being substantially invisible to a  
5 human.

1 26. An apparatus for marking an item, comprising:  
2 a printing controller; and  
3 a printing device in communication with the printing controller and adapted to  
4 print a plurality of machine-readable item codes on the item surface, at least one of the  
5 item codes being associated with the item and being substantially invisible to a human.

1 27. An apparatus for determining information associated with an item,  
2 comprising:  
3 a detection controller; and  
4 a detecting device in communication with the detection controller and adapted to  
5 read at least one of a plurality of machine-readable item codes on the item surface, at

28. The method of claim 27, wherein the detection controller is associated with at least one of: (i) a point of sale system, (ii) an inventory system, (iii) a delivery service system, (iv) an identification system, (v) a warehousing system, (vi) a smart shopping cart system, (vii) a production system, and (viii) an assembly system.